

In the Claims:

Please amend the claims as follows:

1. (currently amended) A method for chemical or biochemical analysis of a target analyte in a target environment, ~~characterized in, that the method comprises the steps of~~ comprising:

-providing a test sample in or in contact with said target environment, which test sample upon interaction with said target analyte is chemically or biologically modified changing its spectral response;

-illuminating said test sample using a program controlled display as a light source, which program controlled display is composed of at least one activated pixel providing the illumination from an illuminating area of said program controlled display;

-detecting light emerging from said test sample by a detector coupled to said program controlled display, and

-displaying test results originating from signals from said detector on said program controlled display.

2. (currently amended) A The method according to claim 1, ~~characterized in that~~ wherein the step of providing a test sample comprises providing the test sample in the target environment.

3. (currently amended) A The method according to claim 1, ~~characterized in, that~~

wherein the step of providing a test sample comprises providing the test sample on said detector, whereby the electrical properties of said detector upon chemical or biochemical interaction with said target analyte is affected.

4. (currently amended) A The method according to ~~any of the preceding claims,~~
~~characterized in, that~~ claim 1, wherein the step of displaying signals comprises displaying
resulting spectra.

5. (currently amended) A The method according to claim 3, ~~characterized in, that~~
wherein the step of displaying signals comprises displaying a chemical or biochemical image
using a photocurrent ~~colour~~ color coded scale.

6. (currently amended) A The method according to ~~any of the preceding claims,~~
~~characterized in, that the method~~ claim 1, further comprises comprising individually
modulating the ~~colour~~ color of each individual pixel by software.

7. (currently amended) A The method according to ~~any of the preceding claims,~~
~~characterized in, that the method~~ claim 1, further comprises comprising individually
modulating the light intensity of each individual pixel by software.

8. (currently amended) A The method according to ~~any of the preceding claims,~~
~~characterized in, that the method~~ claim 1, further comprises comprising scanning the ~~colour~~
color of each individual pixel within the visible range by software.

9. (currently amended) A The method according to ~~any of the preceding claims,~~
~~characterized in, that~~ claim 1, wherein the ~~colour~~ color, size, shape, modulation and
background ~~colour~~ color of said illuminating area is configured through a user interface.

10. (currently amended) A The method according to ~~any of the preceding claims,~~
~~characterized in, that the method~~ claim 1, further comprises comprising displacing said
illuminating area of said program controlled display over time.

11. (currently amended) A The method according to ~~any of the preceding claims,~~
~~characterized in, that~~ claim 1, wherein the step of displaying further comprises displaying said
test results on a part of said program controlled display that is not used for illumination.

12. (currently amended) A The method according to ~~any of the preceding claims,~~
~~characterized in, that the method~~ claim 1, further comprises comprising placing a diffractive
element between said program controlled display and said test sample.

13. (currently amended) A The method according to claim 12, ~~characterized in, that the~~
~~method further comprises~~ further comprising placing a collimating slit between said diffractive
element and said test sample and scanning diffracted light through the collimated silt by
displacement of said illuminating area.

14. (currently amended) A The method according to ~~any of the preceding claims,~~

~~characterized in, that the method~~ claim 1, further ~~comprises~~ comprising a step of evaluating said signals from said detector by software coupled to said program controlled display.

15. (currently amended) A The method according to ~~any of the preceding claims,~~
~~characterized in, that the method~~ claim 1, further ~~comprises~~ comprising a step of evaluating said signals from said detector through an on-line analysis by an expert or an expert system.

16. (currently amended) A The method according to ~~any of the preceding claims,~~
~~characterized in, that the method~~ claim 1, further ~~comprises~~ comprising controlling said program controlled display, said detector, said electronic device and said user interface by a computer.

17. (currently amended) A system for chemical or biochemical analysis of a target analyte in a target environment, ~~characterized in, that said system comprises~~ comprising:

- a test sample, which upon interaction with said target analyte is arranged to be chemically or biologically modified to change its spectral response;
- a program controlled display arranged to be used as a light source for illumination of said test sample and to be used for displaying test results, and
- a detector arranged to detect light emerging from said test sample and coupled to said program controlled display.

18. (currently amended) A The system according to claim 17, ~~characterized in, that~~
wherein said program controlled display is a cathode ray tube computer monitor or a liquid

crystal display monitor.

19. (currently amended) A The system according to claim 17, wherein ~~or 18,~~
~~characterized in, that~~ said test sample comprises molecules or materials specifically designed to
show spectral changes upon chemical or biochemical reactions.

20. (currently amended) A The system according to ~~any of claims 17-19, characterized~~
~~in, that~~ claim 17, wherein said test sample comprises molecules or materials specifically
designed to be used together with rgb-illumination.

21. (currently amended) A The system according to ~~any of claims 17-20, characterized~~
~~in, that~~ claim 17, wherein said test sample is an indicator deposited as a layer on a transparent
substrate, in a cuvette or in a cavity of an analysis plate.

22. (currently amended) A The system according to ~~any of claims 17-20, characterized~~
~~in, that~~ claim 17, wherein said test sample is a detector gate.

23. (currently amended) A The system according to ~~any of claims 17-21, characterized~~
~~in, that~~ claim 17, wherein said detector is a web camera, a digital camera or a video camera.

24. (currently amended) A The system according to ~~any of claims 17-20 or 22,~~
~~characterized in, that~~ claim 17, wherein said detector is a semiconductor device, a conductive
photo-sensitive detector, a polymer photo-detector or an ion-sensitive device.

25. (currently amended) A The system according to ~~any of claims 17-21 or 23,~~
~~characterized in, that the system further comprises~~ claim 17, further comprising a holder for
holding said test sample at a distance from said program controlled display.

26. (currently amended) A The system according to ~~any of claims 17-21 or 23 or 25,~~
~~characterized in, that system further comprises~~ claim 17, further comprising a magnifying lens
between said test sample and said detector.

27. (currently amended) A The system according to ~~any of the preceding claims,~~
~~characterized in, that the system further comprises~~ claim 17, further comprising a diffractive
element arranged to be placed between said program controlled display and said test sample.

28. (currently amended) A The system according to claim 27, ~~characterized in, that the~~
~~system further comprises~~ further comprising a collimating slit arranged to be placed between
said diffractive element and said test sample.

29. (currently amended) A The system according to ~~any of the preceding claims,~~
~~characterized in, that the system further comprises~~ claim 17, further comprising a focussing lens
between said program controlled display and said test sample.